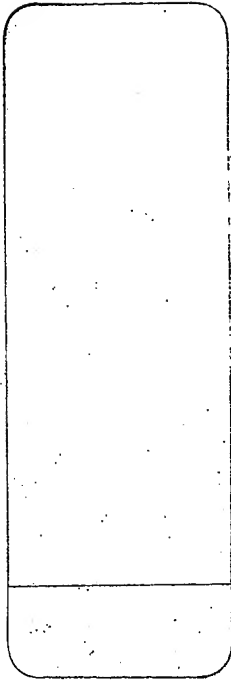


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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,877	10/29/2003	Kyung Ku Lee	P24396	4095
7055	7590	07/05/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			VORTMAN, ANATOLY	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

RECEIVED
OIP/1AP
JUL 13 2005

Office Action Summary

Application No.

10/694,877

Applicant(s)

LEE, KYUNG KU

Examiner

Anatoly Vortman

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because the abstract's language is cumbersome and unclear. The abstract appears to be a literal translation from a foreign document. For example on p. 26, line 2+ is stated: "when an abnormal stat [sic] is occurred between a power source and an electrical load, and a switching mechanism for switching contacts on state or off state according to the power transferred from the actuating mechanism".

The entire abstract should be reviewed in order to correct this and other similar problems. See MPEP § 608.01(b).

2. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms, which are not clear, concise and exact. The language of the specification is cumbersome and unclear. This specification appears to be a literal translation from a foreign document and should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: "the displacement of the horizontal movement is to small to make stably contacts open state or close state when one phase is or two phases are in deficiency." (p. 8, lines 16-19); "to provide a thermal overload relay for reducing its size" (p. 8, last two lines); "generating power when abnormal stat [sic] is occurred" (p. 9, line 11), etc.

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The entire specification should be carefully reviewed in order to correct this and other similar problems.

Claim Objections

3. Claim 1 is objected to because of the following informalities: the plural "s" is omitted for "member" in lines 15 and 16 (p. 24). Also the phrase: "a shifter positioned to be contacted one ends of the main bimetals" (p. 24, lines 19+) should be replaced with "a shifter positioned to be contacted with ends of the main bimetals" for better clarity. Additionally, the phrase "a switching mechanism for switching contacts on state or off state according to the power transferred from the actuating mechanism" (p. 24, lines 6+) should be replaced with the phrase: "a switching mechanism for switching contacts in "on" state or in "off" state, according to the power transferred from the actuating mechanism" for better clarity. The Applicant is advised to carefully review all claims in order to correct this and possible others similar informalities.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1-3, are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US/5,901,025 to Takahashi et al., (Takahashi).

Regarding claims 1-3, Takahashi disclosed (Fig. 17, 18, and 24) a precisely identical thermal overload relay structure as claimed, including shifters (72, 73) rotatably connected via shafts (75a, 75b) to a lever (75) for transferring the force generated by the main bimetals (57) to a switching mechanism, said main bimetals (57) having the heating members (55) wound around them.

6. Alternatively, Claims 1 and 2 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's Admitted Prior Art (AAPA).

Regarding claim 1, AAPA teaches (specification, Fig. 2, p. 1-8): a thermal overload relay comprising:

an actuating mechanism (A) for generating power when an abnormal state occurred between a power source and an electrical load; a switching mechanism (B) for switching contacts on state or off state according the power transferred from the actuating mechanism; a case (1) for receiving the actuating mechanism (A) and the switching mechanism (B);

wherein the actuating mechanism (A) including: a plurality of main bimetals (2) arranged in parallel to the bottom surface of the case (1) for being bended when the abnormal state is occurred;

a plurality of heating members (3), each of the heating members is wound around the corresponding main bimetal (2) for transferring heat occurred due to the abnormal state to the main bimetal (2);

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a shifter (4a, 4b) positioned to be contacted with one ends of the main bimetals (2) in parallel to the bottom surface of the case (1) for being horizontally movable by the bending force of the main bimetals (2); and

a lever (see specification, p. 3, line 16 and p. 4, line 5) connected to the shifter (4a, 4b) for transferring movement force from the shifter (4a, 4b) to the switching mechanism (B).

Regarding claim 2, AAPA teaches (Fig. 2) that the shifter (4a, 4b) comprising an upper shifter (4a) and a lower shifter (4b) so that they are positioned on a vertical plane, each shifter is arranged substantially perpendicular to the main bimetal (2), and parallel to the bottom surface of the case (1).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Alternatively, Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of US/5901025 to Takahashi et al., (Takahashi).

AAPA teaches all and further that the lever is rotatably connected to the shifters (see specification, p. 4, lines 1 and 2), but did not specifically teaches that shafts are used to accomplish said rotatable connections.

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Takahashi teaches an analogous actuating mechanism (Fig. 17 and 24), having a lever (75) being rotatably connected via shafts (75a, 75b) to the shifters (72, 73).

Since the teachings of AAPA and of Takahashi are from the same field of endeavor, the purpose of shafts disclosed by Takahashi would be recognized in the structure of AAPA.

It would have been obvious to a person of ordinary skill in the switch art at the time the invention was made to use shafts as taught by Takahashi in order to accomplish rotatable connections of AAPA in order to provide reliable connections with minimal frictional resistance.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US/4635020, 5054754, 5901025, 6512434, 6621403, and JP/09-63449 disclosed switching mechanisms for circuit breakers.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 571-272-2047. The examiner can normally be reached on Monday-Friday, between 10:00 am and 6:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Lynn Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AV



Anatoly Vortman
Primary Examiner
Art Unit 2835

Notice of References Cited	Application/Control No. 10/694,877	Applicant(s)/Patent Under Reexamination LEE, KYUNG KU	
	Examiner Anatoly Vortman	Art Unit 2835	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-4,635,020	01-1987	Sako, Yuji	337/49
	B	US-5,054,754	10-1991	Akiike et al.	267/159
	C	US-5,901,025	05-1999	Takahashi et al.	361/93.4
	D	US-6,512,434	01-2003	Kuboyama et al.	335/45
	E	US-6,621,403	09-2003	Nagahiro et al.	337/75
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	JP 09063449 A	03-1997	Japan	FURUHATA, YUKIO	H01H 71/74
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

DERWENT-ACC-NO: 1997-218145

DERWENT-WEEK: 199720

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TITLE: Thermal overload relay for overcurrent
protection of e.g. motor - has adjustment dial, which turns
setting screw to operate expansion link, whose base is
provided with hole in which head of setting screw is
pres-inserted

PATENT-ASSIGNEE: FUJI ELECTRIC CO LTD[FJIE]

PRIORITY-DATA: 1995JP-0211501 (August 21, 1995)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
PAGES MAIN-IPC		
JP 09063449 A	March 7, 1997	N/A
004 H01H 071/74		

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
JP 09063449A	N/A	1995JP-0211501
August 21, 1995		

INT-CL (IPC): H01H011/00, H01H061/01 , H01H069/01 , H01H071/74

ABSTRACTED-PUB-NO: JP 09063449A

BASIC-ABSTRACT:

The relay has a heater connected to a main circuit. A bimetal is wound to the heater. A shifter moves according to the curvature of the bimetal. An inverting plate is inverted through the movement of the shifter. An expansion link adjusts the operating position of the inverting plate. A setting screw (1) is turned by an adjustment dial (3) to operate the expansion link.

The adjustment dial is mounted to the setting screw. Two protrusions (1a) are individually formed on opposite sides of the head of the setting screw. The base of the adjustment dial is provided with a hole in which the setting screw head is press-inserted.

ADVANTAGE - Improves precision corresponding to scale and pointer of adjustment dial by press-inserting screw head side protrusion in any direction. Promotes short automatic-assembly time by press-inserting two stoppers of dial with few adjustments. Enables dial pointer to reliably correspond to setpoint scale of case.

CHOSEN-DRAWING: Dwg.1/5

TITLE-TERMS: THERMAL OVERLOAD RELAY OVERCURRENT PROTECT MOTOR ADJUST DIAL TURN

SET SCREW OPERATE EXPAND LINK BASE HOLE HEAD SET SCREW
INSERT

DERWENT-CLASS: V03 X13

EPI-CODES: V03-D05D; V03-D06B; X13-D03; X13-D08;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N1997-180124

(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開平9-63449

(43) 公開日 平成9年(1997)3月7日

(51) Int.Cl. ⁸	識別記号	庁内整理番号	F I	技術表示箇所
H 0 1 H 71/74			H 0 1 H 71/74	
11/00			11/00	U
61/01			61/01	E
69/01			69/01	

審査請求 未請求 請求項の数2 O L (全 4 頁)

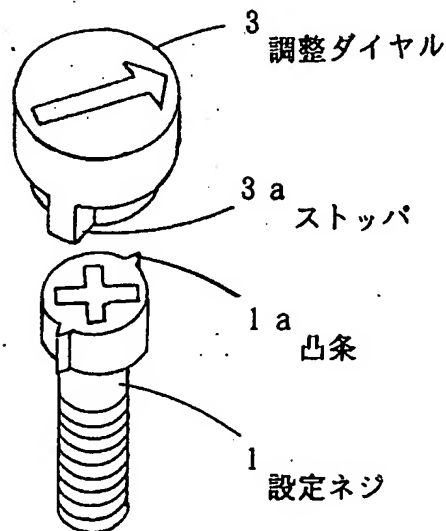
(21) 出願番号	特願平7-211501	(71) 出願人	000005234 富士電機株式会社 神奈川県川崎市川崎区田辺新田1番1号
(22) 出願日	平成7年(1995)8月21日	(72) 発明者	古畑 幸生 神奈川県川崎市川崎区田辺新田1番1号 富士電機株式会社内
		(74) 代理人	弁理士 山口 巖

(54) 【発明の名称】 熱形過負荷継電器およびその組立方法

(57) 【要約】

【課題】調整ダイヤルの指針をケースの設定値の基準目盛りに確実に一致させる。

【解決手段】頭部に凸条1aを形成した設定ネジ1を図示しない継電器内で基準状態に調整して保持しておき、底面に丸穴が形成された調整ダイヤル3の指針を不図示のケースの基準目盛りに一致させた状態で調整ダイヤル3の丸穴を設定ネジ1の頭部に圧入させる。



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【特許請求の範囲】

【請求項1】主回路に接続されるヒータと、このヒータが巻回されたバイメタルと、このバイメタルの湾曲に応じて移動するシフトと、このシフトの移動により反転動作する反転板と、この反転板の動作位置を調整する調整リンクと、この調整リンクを操作する設定ネジに一体的に取付けられた調整ダイヤルとを備えた熱形過負荷継電器において、前記設定ネジは、頭部側面に圧入用の凸条が少なくとも1つ形成され、

前記調整ダイヤルは、その底面側に設定ネジの頭部が圧入される丸穴を有することを特徴とする熱形過負荷継電器。

【請求項2】主回路に接続されるヒータと、このヒータが巻回されたバイメタルと、このバイメタルの湾曲に応じて移動するシフトと、このシフトの移動により反転動作する反転板と、この反転板の動作位置を調整する調整リンクと、この調整リンクを操作する設定ネジに一体的に取付けられた調整ダイヤルとを備えた熱形過負荷継電器における調整ダイヤルの組立方法であって、頭部側面に圧入用の凸条が少なくとも1つ形成された設定ネジがケースに基準状態で取付けられ、調整ダイヤルは、その底面に丸穴が設けられるとともに丸穴の外周面に形成された調整ダイヤルのストッパがケースに形成されたストッパに接触させた後、前記丸穴を設定ネジの頭部に圧入することを特徴とする熱形過負荷継電器の組立方法。

【発明の詳細な説明】

【0001】

【産業上の利用分野】この発明は、電動機などの負荷に流れる過電流をヒータに通電してバイメタルを湾曲させ、このバイメタルの変位によって接点を開閉させる熱形過負荷継電器に関し、特に設定値に応じて調整ダイヤルを回転させて目盛りを定める調整ダイヤル関係の構造とこの組立方法に関する。

【0002】

【従来の技術】この種の熱形過負荷継電器の動作原理を図3に示す。設定部は、樹脂製のケース11に板バネ16を介して取付けられた設定ネジ15とこの設定ネジ15の頭部に一体的に取付けられた調整ダイヤル17とからなる。設定ネジ15の端部は固定支点12bを中心として回転可能でバネ13によって押される調整リンク12の一方の脚片の凸部と当接している。ヒータ21で巻かれたバイメタル22はヒータ21の電流が増すと温度の上昇によってスライダ23をA方向へ移動させるように変位し、このスライダ23を介して一端が調整リンク12の他方の脚片に回転可能に取付けられた釈放レバー14を時計回りに回転させて寸法dの間隔を縮める。釈放レバー14が更に回転してバネ26を押圧し、バネ26が死点位置を越えると反転板27が反転して接点28を

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閉じる。ダイヤル17を操作して設定ネジ15をB方向に移動させると釈放レバー14は一点鎖線のCの位置になって間隔dが大きくなり、電流がより大でなければ動作できないようになり、ダイヤル17の操作により設定電流が定められる。

【0003】図4によってこの設定部の構造を詳しく説明する。ケース11には板バネ16が入る溝が形成され、設定ネジ15の頭部が挿入される溝に調整ダイヤル17のストッパ17bの回転制限用のケースストッパ11a、および設定値表示11b、更にネジ孔11cが形成されている。調整ダイヤル17は指針部17cと共に設定ネジ15のネジ溝15aと嵌まって圧入できる凸部17aが形成されている。ケース11に板バネ16、設定ネジ15を結合させて固定支点12b付き調整リンク12の凸部12cと位置合わせしてから設定ネジ15に調整ダイヤル17を嵌める。

【0004】図5は設定ネジ15のネジ溝15aと調整ダイヤル17の凸部17aとの関係を示す図で、凸部17aは角度θ毎に嵌合できる構造であった。

【0005】

【発明が解決しようとする課題】従来の技術で述べた例では、図5に示すように設定ネジの溝と調整ダイヤルの凸部が一致しないと嵌まらず角度θ毎に嵌合位置が定められる。ケースのストッパを基準として調整ダイヤルのストッパを当接させ指針を目盛りと合わせて嵌める時に、調整ネジの溝の位置が一定でないため、最大角度がθだけずれて圧入されてしまい、あらかじめ印字されている目盛りと調整ダイヤルの指針とがずれてしまうという欠点があった。

【0006】この発明の課題は、2つのストッパが当接する状態で設定値表示の基準目盛りと調整ダイヤルの指針が一致する熱形過負荷継電器を提供することである。

【0007】

【課題を解決するための手段】前述した課題を達成するため請求項1に記載した発明は、主回路に接続されるヒータと、このヒータが巻回されたバイメタルと、このバイメタルの湾曲に応じて移動するシフトと、このシフトの移動により反転動作する反転板と、この反転板の動作位置を調整する調整リンクと、この調整リンクを操作する設定ネジに一体的に取付けられた調整ダイヤルとを備えた熱形過負荷継電器において、前記設定ネジは頭部側面に圧入用の凸条が少なくとも1つ形成され、前記調整ダイヤルはその底面側に設定ネジの頭部が圧入される丸穴を有することを特徴とする。

【0008】また、請求項2に記載の発明は、主回路に接続されるヒータと、このヒータが巻回されたバイメタルと、このバイメタルの湾曲に応じて移動するシフトと、このシフトの移動により反転動作する反転板と、この反転板の動作位置を調整する調整リンクと、この調整リンクを操作する設定ネジに一体的に取付けられた調整

ダイヤルとを備えた熱形過負荷継電器における調整ダイヤルの組立方法であって、頭部側面に圧入用の凸条が少なくとも1つ形成された設定ネジがケースに基準状態で取付けられ、調整ダイヤルは、その底面に丸穴が設けられるとともに丸穴の外周面に形成された調整ダイヤルのストッパがケースに形成されたストッパに接触させた後、前記丸穴を設定ネジの頭部に圧入することを特徴とする。

【0009】

【作用】請求項1または2に記載の発明によれば、調整ダイヤルの内側の凸部を無くしてどこでも設定ネジに圧入できるので、ケースのストッパに調整ダイヤルのストッパを接触させると調整ダイヤルの指針はケースの設定値の目盛りと一致する位置で圧入して用いることができるので設定値と指針が常に一致する。

【0010】

【実施例】この発明の実施例を図1に示す。図1では請求項1または2に記載の発明の主要部のみを示し、他の構成は図3に示すものと同一であるので省略している。図1において、設定ネジ1の頭部側面に凸条1aを設け、ケースに組み込み入力を定めた値とする基準状態にして調整する。そして、調整ダイヤル3にはストッパ3aと、図では見えない後述する図2に示すような丸穴が形成されている。この調整ダイヤル3の取付けは、ストッパ3aをケースのストッパ（図4参照）の両側面を接触させたまま調整ダイヤル3内の図示しない丸穴を設定ネジ1の頭部に圧入する。図では凸部1aを強調したが圧入に必要な寸法は少しのため、調整ダイヤル3の丸穴と設定ネジ1の頂部は嵌まり易い状態になる。

【0011】図2はこの発明の別な実施例をわかりやすいように示した図で、設定ネジ2に凸部2aを複数設けて、調整ダイヤル3の丸穴3bを同様に圧入する。圧入を安定にできるように凸部の数を図1より多くしてある。なお、図示しないが、図4の設定ネジ15のネジ溝15aの深さを浅くしても同様に実現できる。

【0012】

【発明の効果】請求項1または2に記載した発明によれば、調整ダイヤルの設定ネジ圧入用の穴を丸穴とし、設定ネジの凸条がどの位置でも圧入できるので、基準の目盛りと調整ダイヤルの指針が常に一致できて精度が向上する。また、請求項2に記載の発明によれば、自動で組み立てする時に2つのストッパを基準として無調整で圧入できるので高い精度で、かつ短い時間で組み立てられる。

【図面の簡単な説明】

【図1】請求項1または2に記載の発明の実施例の主要部の斜視図

【図2】請求項1または2に記載の発明の他の実施例の主要部の説明図

【図3】熱形過負荷継電器の動作原理図

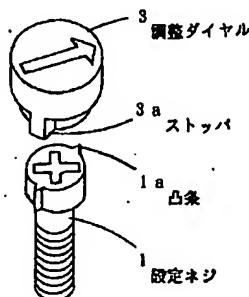
【図4】熱形過負荷継電器の従来例の構成図

【図5】調整ネジと調整ダイヤルの説明図

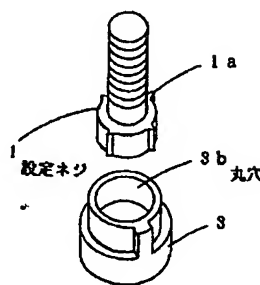
【符号の説明】

- | | |
|-----|--------|
| 1 | 設定ネジ |
| 1a | 凸条 |
| 2 | 設定ネジ |
| 2a | 凸部 |
| 3 | 調整ダイヤル |
| 3a | ストッパ |
| 3b | 丸穴 |
| 12 | 調整リンク |
| 12b | 固定支点 |
| 13 | バネ |
| 14 | 釈放レバー |
| 15 | 設定ネジ |
| 21 | ヒータ |
| 22 | バイメタル |
| 27 | 反転板 |
| 28 | 接点 |

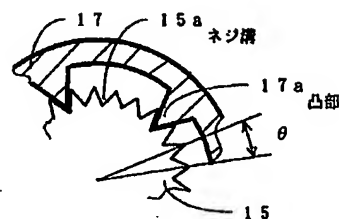
【図1】



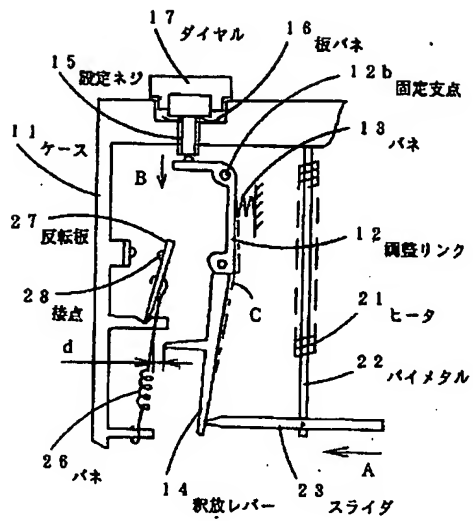
【図2】



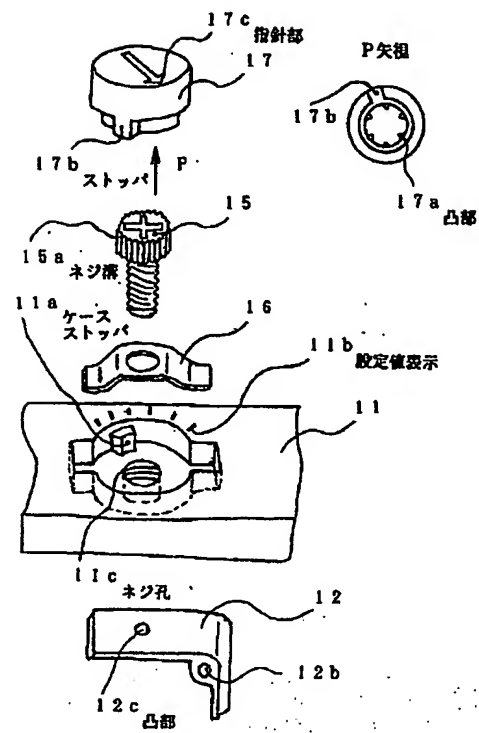
【図5】



【図3】



【図4】



NEW CENTRAL FAX NUMBER

Effective July 15, 2005

On July 15, 2005, the Central FAX Number will change to **571-273-8300**. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number. To give customers time to adjust to the new Central FAX Number, faxes sent to the old number (703-872-9306) will be routed to the new number until September 15, 2005.

After September 15, 2005, the old number will no longer be in service and **571-273-8300** will be the only facsimile number recognized for "centralized delivery".

CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.